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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,272	XU, WEI	
	Examiner	Art Unit	
	Nghi V Tran	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-88* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-88* is/are rejected.

7)☒ Claim(s) *88* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/11/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-88 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-89 of copending Application No. 09/930164. Although the conflicting claims are not identical, they are not patentable distinct from each other because the limitation of copending Application No. 09/930164 is overlapping the limitation of copending Application No. 09/930272.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

4. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 88 is objected to because of the following informalities: "an network" appears to be a typo error for --a network--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 3, 7-8, 18-23, 49, 53, 58, and 73 are rejected under 35 U.S.C. 102(e) as being anticipated by Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf).

8. Taking claim 1 as an exemplary claim, Gleichauf teaches a method of delivering a network service (figure 2), the method comprising:

- receiving a data packet, the data packet including a service address and a payload (item 18 of figure 2; and column 4, lines 50-67 i.e. router is capable of receiving packet among the internal or external network);
- identifying a plurality of network applications associated with the service address of the data packet (item 18 of figure 2 i.e. router has routing table which identify a plurality of network application based on the service address), the plurality of network applications associated with the service address including a first network application (item 20

of figure 2 i.e. IDS), a second network application (item 16 of figure 2), and a third network application (item 12 of figure 2);

- sending at least the payload of the data packet to the first network application (figure 2 i.e. IDS capture and monitor packet. Therefore, router must be capable of sending packet to IDS);
- sending at least the payload of the data packet to the second network application (figure 2; column 4, lines 60-67; and column 5, lines 48-57);
- receiving a second network application response packet from the second network application (figure 2 i.e. router must be capable of receiving an outgoing package from firewall); and
- sending a third network application packet to the third network application, the third network application packet based at least in part on the second network application response packet (column 5, line 48-57; and item 18 of figure 2 i.e. router must be capable of sending packages to workstation through firewall which interpret as the workstation is capable of receiving packets based on the firewall respond).

9. With respect to claim 3, Gleichauf further teaches receiving a third network application response packet from the third network application (item 10 i.e. workstation is capable of sending packet to router); and sending a service response packet to a source address of the data packet, the service response packet based at least in part on the third network application response packet

(figure 2 i.e. inside is capable sending a respond packet from workstation to outside).

10. With respect to claim 7, Gleichauf further teaches the first network application has a first network application address and the second network application has a second network application address (items 20 and 16 of figure 2 i.e. the first and second network application addresses are inherent. "Router is of a type know in the field of network, making connections between networks at the transport layer of the OSI model. Router decides whether to forward a packet by examining the packet's protocol level addresses. Router is capable of handling any datalink protocol. Router inspects packets incoming from the external network to determine which should be forwarded". See The prior art made of record, Shanklin, U.S. Patent Number 6,578,147); sending at least the payload of the data packet to the first network application includes identifying the first network application address based at least in part on the service address (items 18 and 20 i.e. the first network application address based on the service address are inherently for sending packets to IDS); and sending at least the payload of the data packet to the second network application includes identifying the second network application address based at least in part on the service address (items 20 and 16 i.e. the second network application address based on the service address are inherently for sending packets to firewall).

11. With respect to claim 8, Gleichauf further teaches the data packet includes a service port identifier (A service port identifier is inherent because port must be including in the data packet. See The prior art made of record, Matsumoto et al., U.S. Patent Application Publication Number 2003/0202464); sending at least the payload of the data packet to the first network application includes identifying the first network application address based at least in part on the service port identifier (items 18 and 20 i.e. router is capable of sending the data packet to IDS including port identifier); and sending at least the payload of the data packet to the second network application includes identifying the second network application address based at least in part on the service port identifier (items 18 and 16 i.e. router is capable sending the data packet to firewall including port identifier).

12. With respect to claim 18, Gleichauf further teaches the first network application is different from the second network application, the second network application is different from the third network application, and the first network application is different from the third network application (items 12, 16, 18, and 20 of figure 2).

13. With respect to claim 19, Gleichauf further teaches the first network application is a first version of a network application and the second network application is a second version of the network application (item 20 of figure 2 i.e.

IDS is a first version of a network application and item 16 of figure 2 i.e. firewall is a second network application).

14. With respect to claim 20, Gleichauf further teaches the first version of the network application is from a first vendor, the second version of the network application is from a second vendor, and the first vendor is different from the second vendor (item 20 of figure 2 i.e. IDS is a first version of a network application and item 16 of figure 2 i.e. firewall is a second network application. IDS and firewall are from different vendor).

15. With respect to claim 21, Gleichauf further teaches the first network application is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application; and the second network application is a different network application selected from the group consisting of an intrusion detection application, a virus detection application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, a database application, and a load balancing application (figure 2 i.e. IDS is capable of an intrusion detection as first network application and firewall is capable of a firewall application as second network application).

16. With respect to claim 22, Gleichauf further teaches receiving a third network application response packet from the third network application (item 12 of figure 2 i.e. workstation is capable of sending or responding); generating a service response packet as a data product, the service response packet based at least in part on the third network application response packet (item 18 of figure 2; and column 4, lines 50-67 i.e. router is capable of sending based on the workstation responding packet); and sending a service response packet to a source address of the data packet (item 18 of figure 2; and column 4, lines 50-67 i.e. "router serves as a gateway between internal network and an external network which is inherent as sending a responding packet to a source address of the data packet).

17. Taking claim 23 as an exemplary claim, Gleichauf teaches a method to manage delivery of a network service (figure 2), the method comprising:

- receiving a data packet having a service address and a payload (item 18 of figure 2; and column 4, lines 50-67 i.e. router is capable of receiving packet among the internal or external network);
- identifying a plurality of network applications (item 18 of figure 2 i.e. router is coupled to the firewall, IDS, and workstation. Therefore, router is capable of identify each of network applications) based at least in part on the service address, the plurality of network applications including at least a first network application (item 20 i.e.

IDS), a second network application (item 16 i.e. firewall), and a third network application (item 12 i.e. workstation);

- distributing at least the payload of the data packet to the first network application and the second network application based at least in part on the service address (column 4, lines 35-49);
- sequentially processing the data packet through at least the second network application and the third network application based at least in part on the service address (item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data packet); and
- sending a data packet service response based at least in part on the data packet sequential processing (item 16 of figure 2 i.e. firewall is capable of sending a response packet to the workstation).

18. Claims 49, 53, 58, and 73 are also rejected for the same reason set forth in claim 23 above.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 2, 6, 9-17, 24-27, 50-52, 54-57, 59-61, 74, and 79-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf as applied to claims 1, 23, 49, 58, and 73 above, and further in view of Network Tap, http://www.netoptics.com, pages 1-28 (hereinafter Network Tap).

21. With respect to claim 2, Gleichauf further teaches receiving a data packet includes receiving a data packet via a first network interface (item 30 of figure 2 and item 18); sending at least the payload of the data packet to the first network application includes sending at least the payload of the data packet to the first network application via a second network interface (item 20 of figure 2 i.e. IDS receives packets from router); and sending at least the payload of the data packet to the second network application includes sending at least the payload of the data packet to the second network application (item 16 of figure 2 i.e. firewall is capable of receiving packets from router).

However, Gleichauf fails to teach sending at least the payload of the data packet to the second network application includes sending at least the payload of the data packet to the second network application via the second network interface, the second network interface being different than the first network interface.

In a method of delivering a network service, Network Tap discloses sending at least the payload of the data packet to both of the first and second network application via the second network interface, the second network

interface being different than the first network interface (pages 7-8 i.e. network tap is capable of regenerating signals or splitting the signals which "allows user to monitor the full duplex traffic between two Fast Ethernet devices").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending packet to both of the first and second network application via the second network interface because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

22. With respect to claim 6, Gleichauf further teaches sending at least the payload of the data packet to the first network application includes: identifying the first network application based at least in part on the service address of the data packet and the first network interface (items 18 and 20 of figure 2 i.e. router is capable of inspect packets incoming from the external network to determine which should be forwarded into the IDS or firewall); and sending at least the payload of the data packet to the first network application via a second network interface (item 16 of figure 2 i.e. firewall is capable of receiving an attack signature via different network interface than IDS).

23. With respect to claim 9, Gleichauf further teaches the first network application has a first network application address and the second network application has a second network application address (the first and second network addresses are inherent because the first network application is different from the second network application); sending at least the payload of the data packet to the first network application includes identifying the first network application address based at least in part on the service address and the first network interface (items 18 and 20 i.e. router is capable for sending the incoming packet); and sending at least the payload of the data packet to the second network application includes identifying the second network application address based at least in part on the service address and the first network interface (items 18 and 16 i.e. router is capable for sending the incoming packet).

24. With respect to claim 10, Gleichauf further teaches the data packet includes a service port identifier (A service port identifier is inherent because port must be including in the data packet. See The prior art made of record, Matsumoto et al., U.S. Patent Application Publication Number 2003/0202464); sending at least the payload of the data packet to the first network application includes identifying the first network application address based at least in part on the service port identifier (items 18 and 20 i.e. router is capable of sending the data packet to IDS including port identifier); and sending at least the payload of the data packet to the second network application includes identifying the second network application address based at least in part on the service port identifier

(items 18 and 20 i.e. router is capable of sending the data packet to IDS including port identifier).

25. With respect to claim 11, Gleichauf further teaches the second network application response packet includes a second network application response source address (items 16 and 20 i.e. firewall is capable of sending packets to router); the third network application has a third network application address (item 10 i.e. the third network application address are inherent on each of the workstation); and sending a third network application packet to the third network application includes identifying the third network application address based at least in part on the second network application response source address (item 10, 12, and 16 i.e. firewall is capable of sending packets to inside which is inherent as workstation receives packets based on the responding of the firewall).

26. With respect to claim 12, Gleichauf further teaches the first network application address is different from the first network application response source address (column 7, line 64 through column 8 line 67; column 9, lines 45-50; and item 134 of figure 4 i.e. IDS is capable of disabling and sending an issue alarm about the attack based on the IP fragment reassembly. Therefore, the first network application address is different from the first network application response source address).

27. With respect to claim 13, Gleichauf further teaches the first network application address is the same as the first network application response source address (column 7, line 64 through column 8 line 67; column 9, lines 45-50; and item 134 of figure 4 i.e. IDS is capable of enabling and updating based on the types of packets that pass through the network).

28. With respect to claim 14, Gleichauf further teaches receiving a second network application response packet from the second network application includes receiving the second network application response packet; and sending a third network application packet to the third network application includes sending the third network application packet to the third network application.

However, Gleichauf fails to teach receiving a second network application response packet from the second network application includes receiving the second network application response packet from a third network interface, the third network interface being different from the second network interface and the first network interface; and sending a third network application packet to the third network application includes sending the third network application packet to the third network application via a fourth network interface, the fourth network interface being different from the third network interface, the second network interface, and the first network interface.

In a method of delivering a network service, Network Tap discloses the first, second, third, and the fourth network interface, the network interfaces being

different from each other (pages 11-15 i.e. network tap has fourth network interfaces: two for networking and the other two for analyzing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via the first, second, third, and fourth network interfaces because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

29. With respect to claim 15, Gleichauf further teaches receiving a third network application response packet from the third network application; sending a second network application return packet to the second network application; receiving a second network application return response packet from the second network application; and sending a service response packet, the service response packet based at least in part on the second network application return response packet.

However, Gleichauf fails to teach receiving a third network application response packet from the third network application via the fourth network interface; sending a second network application return packet to the second network application via the third network interface, the second network application return packet based at least in part on the third network application

response packet; receiving a second network application return response packet from the second network application via the second network interface; and sending a service response packet via the first network interface.

In a method of delivering a network service, Network Tap discloses receiving a third network application response packet from the third network application via the fourth network interface; sending a second network application return packet to the second network application via the third network interface, the second network application return packet based at least in part on the third network application response packet; receiving a second network application return response packet from the second network application via the second network interface; and sending a service response packet via the first network interface (pages 11-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via the first, second, third, and fourth network interface because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

30. With respect to claim 16, Gleichauf fails to teach sending a first network application return packet to the first network application via the second network

interface, the first network application return packet based at least in part on the second network application return response packet.

In a method of delivering a network service, Network Tap discloses sending a first network application return packet to the first network application via the second network interface, the first network application return packet based at least in part on the second network application return response packet (pages 11-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via the first and second network interface because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

31. With respect to claim 17, Gleichauf further teaches sending at least the payload of the data packet to the first network application; sending at least the payload of the data packet to the second network application; and sending the third network application packet to the third network application.

However, Gleichauf fails to teach sending at least the payload of the data packet to the first network application is based at least in part on a stateless identification of the first network application; sending at least the payload of the

data packet to the second network application is based at least in part on a stateless identification of the second network application; and sending the third network application packet to the third network application is based at least in part on a stateless identification of the third network application.

In a method of delivering a network service, Network Tap discloses sending at least the payload of the data packet to the first network application is based at least in part on a stateless identification of the first network application; sending at least the payload of the data packet to the second network application is based at least in part on a stateless identification of the second network application; and sending the third network application packet to the third network application is based at least in part on a stateless identification of the third network application (pages 11-15 i.e. a stateless identification of the first, second, and third network applications are inherent as tap splitter).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets based on at least in part of a stateless identification of the first, second, and third network application because this feature may avoids interruption of network traffic with or without lost of the power. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to allow a network manager to connect and disconnect the Analyzer at any time without disrupting the traffic on the network.

32. Taking claim 24 as an exemplary claim, Gleichauf further teaches sequentially processing the data packet through at least the second network application and the third network application.

However, Gleichauf fails to teach sequentially processing the data packet through at least the second network application and the third network application consists essentially of statelessly sequentially processing the data packet through at least the second network application and the third network application.

In a method of delivering a network service, Network Tap discloses sequentially processing the data packet through at least the second network application and the third network application consists essentially of statelessly sequentially processing the data packet through at least the second network application and the third network application (pages 11-15 i.e. "statelessly sequentially processing" is inherent because tap is capable of sending to the second and third network application without encapsulating or checking the network address).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending packets based on at least in part of a statelessly sequentially processing the data packet through second and third network application because this feature may avoids bottleneck. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to allow a network manager to

connect and disconnect the Analyzer at any time without disrupting the traffic on the network.

33. Claims 50, 54, and 59 are also rejected for the same reason set forth in claim 24 above.

34. Taking claim 25 as an exemplary claim, Gleichauf further teaches receiving a data packet having a service address and a payload includes receiving the data packet; distributing at least the payload of the data packet to the first network application and the second network application includes distributing at least the payload of the data packet to the first network application and the second network application; sequentially processing the data packet through at least the second network application and the third network application includes sequentially processing the data packet through at least the second network application and the third network application; and sending a data packet service response includes sending the data packet service response.

However, Gleichauf fails to teach receiving a data packet having a service address and a payload includes receiving the data packet via a first network interface; distributing at least the payload of the data packet to the first network application and the second network application includes distributing at least the payload of the data packet to the first network application and the second network application via a second network interface, the second network interface being different from the first network interface; sequentially processing the data

packet through at least the second network application and the third network application includes sequentially processing the data packet through at least the second network application and the third network application via the second network interface and one or more additional network interfaces, the one or more additional network interfaces being different from the first network interface and the second network interface; and sending a data packet service response includes sending the data packet service response via the first network interface.

In a method of delivering a network service, Network Tap discloses the first, second, third, and the one or more additional network interfaces, the network interfaces being different from each other (pages 16-20 i.e. network tap has at least four network interfaces: at least two for networking and another two for analyzing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via at least four network interfaces because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

35. Claims 51, 55, and 60 are also rejected for the same reason set forth in claim 25 above.

36. Taking claim 26 as an exemplary claim, Gleichauf further teaches receiving a data packet includes receiving a data packet including a service port identifier (A service port identifier is inherent because port must be including in the data packet. See The prior art made of record, Matsumoto et al., U.S. Patent Application Publication Number 2003/0202464); distributing at least the payload of the data packet to the first network application and the second network application based at least in part on the service address includes distributing at least the payload of the data packet to the first network application and the second network application based at least in part on the service address and the service port identifier (column 4, lines 35-49); and sequentially processing the data packet through at least the second network application and the third network application based at least in part on the service address includes sequentially processing the data packet through at least the second network application and the third network application based at least in part on the service address and the service port identifier (item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data packet).

37. Claims 52, 56, 61, and 74 are also rejected for the same reason set forth in claim 26 above.

38. Taking claim 27 as an exemplary claim, Gleichauf further teaches sending

a data packet service response based at least in part on the data packet sequential processing includes generating the data packet service response as a data product based at least in part on the data packet sequential processing (figure 2; column 7, line 64 through column 8 line 67; column 9, lines 45-50; and item 134 of figure 4 i.e. IDS is capable of enabling and updating based on the types of packets that pass through the network).

39. Claim 57 is also rejected for the same reason set forth in claim 27 above.

40. With respect to claim 79, Gleichauf further teaches the first packeting engine includes means for tracking packet progress (column 1, lines 34- 45; and item 20 of figure 2).

41. With respect to claim 80, Gleichauf further teaches the first network application (item 20 of figure 2 i.e. IDS) and the second network application (item 16 of figure 2) are different vendor implementations of a network application.

42. Claims 28-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf), in view of Network Tap, http://www.netoptics.com, page 1-28 (hereinafter Network Tap).

43. With respect to claim 28, Gleichauf teaches a system to manage delivery of a network service (figure 2), the system comprising:

- receiving a data packet, the data packet including a service address (item 18 of figure 2; and column 4, lines 50-67 i.e. router is capable of receiving packet among the internal or external network);
    - packet processing logic to store packet processing information, the packet processing information including a service address field to store the service address, the service address associated with a plurality of network applications (item 18 of figure 2 i.e. router is coupled to the firewall, IDS, and workstation. Therefore, router is capable of identify each of network applications), the plurality of network applications including a first network application (item 20 of figure 2), a second network application (item 16 of figure 2), and a third network application (items 12 of figure 2);
    - packet distribution information including one or more packet distribution entries, a packet distribution entry including a source address field to store a source address and a destination address field to store a destination address (column 4, lines 35-49); and
    - packet sequential processing information including one or more packet sequencing entries, a packet sequencing entry including a source address field to store a source address and a

destination address field to store a destination address ((item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data packet);

- transmitting at least the payload of the data packet to the first network application and the second network application, the second network application being different from the first network application (items 18, 20, and 16 i.e. router is capable of routing packets to IDS and firewall);
- receiving a second network application response packet (item 16 and 18 of figure 2 i.e. firewall is capable of sending packet back to firewall); and
- sending a third network application packet to the third network application, the third network application packet based at least in part on the second network application response packet, the third network application being different from the first network application (items 18, 16, and 12 i.e. router is capable of sending packets to workstation via firewall. "response packet" is not claimed as "looping back". This may be interpreted as workstation receiving packet from firewall).

In a system to manage delivery of a network service, Network Tap discloses the first, second, third, and the fourth network interface, the network interfaces being different from each other (pages 11-15 i.e. network tap has fourth network interfaces: two for networking and the other two for analyzing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via the first, second, third, and fourth network interfaces because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

44. With respect to claim 29, Gleichauf further teaches a packet distribution entry of the one or more packet distribution entries includes a received interface field to store a received interface identifier, and a send interface field to store a send interface identifier (column 4, lines 35-49 i.e. router is capable of encapsulating and decapsulating between layer 2 and layer 3 for routing purpose which is inherent as storing a received interface identifier); and a packet sequencing entry of the one or more packet sequencing entries includes a received interface field to store a received interface identifier; and a send interface field to store a send interface identifier (item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data packet).

45. With respect to claim 30, Gleichauf further teaches the data packet includes a first service port identifier (A service port identifier is inherent because

port must be including in the data packet. See The prior art made of record, Matsumoto et al., U.S. Patent Application Publication Number 2003/0202464); a packet distribution entry of the one or more packet distribution entries includes a service port field to store a service port identifier (column 4, lines 35-49); and a packet sequencing entry of the one or more packet sequencing entries includes a service port field to store a service port identifier (item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data packet).

46. With respect to claim 31, Gleichauf further teaches the data packet includes a first service port identifier (A service port identifier is inherent because port must be including in the data packet. See The prior art made of record, Matsumoto et al., U.S. Patent Application Publication Number 2003/0202464); a packet distribution entry of the one or more packet distribution entries includes a received interface field to store a received interface identifier, a service port field to store a service port identifier, a send interface field to store a send interface identifier, and a send address field to store a send address (column 4, lines 35-49); and a packet sequencing entry of the one or more packet sequencing entries includes a received interface field to store a received interface identifier, a service port field to store a service port identifier, a send interface field to store a send interface identifier, and a send address field to store a send address (item 18 of figure 2 i.e. router is capable of routing to firewall and workstation based on the network address which is inherent as sequentially processing the data

packet).

47. With respect to claim 32, Gleichauf further teaches the send address is a network address of a network application system of the plurality of network application systems (items 12, 16, 18, and 20 of figure 2 i.e. workstations, IDS, router, and firewall).

48. With respect to claim 33, Gleichauf further teaches the send address is a media access controller address of a network application system of the plurality of network application systems (items 12, 16, 18, and 20 of figure 2 i.e. workstations, IDS, router, and firewall. Router routes network packets among the internal and external network based on the MAC address).

49. With respect to claim 34, Gleichauf further teaches each packet distribution entry of the plurality of packet distribution entries includes a destination system type field to store a destination system type identifier (item 18 of figure 2 i.e. router has a routing table which is inherent as storing a destination system identifier).

50. With respect to claim 35, Gleichauf further teaches the first network application system is a first implementation of one network application system (item 20 of figure 2) and the second network application system is a second

implementation of the one network application system (item 16 of figure 2).

51. With respect to claim 36, Gleichauf further teaches a plurality of network application systems (figure 2 i.e. router, firewall, IDS, and workstation).

However, Gleichauf fails to teach a plurality of network application systems, one or more of the plurality of network application systems coupled to one or more of the second network interface, the third network interface, and the fourth network interface.

In a system to manage delivery of a network service, Network Tap discloses one or more of the plurality of network application systems coupled to one or more of the second network interface, the third network interface, and the fourth network interface (pages 11-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by sending and receiving packets via the first, second, third, and fourth network interfaces because this feature may avoids bottleneck and other overhead processors. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to reduces the cost and upgrade easily with an existing network devices without the delay of the packets.

52. With respect to claim 37, Gleichauf further teaches the plurality of network application systems include one or more of an intrusion detection application, a

virus detection application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, a database application, and a load balancing application (figures 2-3).

53. With respect to claim 38, Gleichauf further teaches the first network application system is selected from the group consisting of an intrusion detection application, a virus detection application, a firewall application, a web switch, a network security application, and a load balancing application; and the second network application system is a different network application selected from the group consisting of an intrusion detection application, a virus detection application, a virtual private network application, a firewall application, a web switch, a network security application, a proxy application, a database application, and a load balancing application (figures 2-3).

54. With respect to claim 39, Gleichauf further teaches the data packet uses one or more protocols of one of a TCP/IP network protocol suite and a UDP/IP network protocol suite (column 6, lines 31-42).

55. With respect to claim 40, Gleichauf further teaches the one or more protocols includes an IPv4 network protocol (column 6, lines 31-42 i.e. IPv4 is inherent because IPv4 is a standard of Internet which is widely used now a day).

56. With respect to claim 41, Gleichauf is silent on the one or more protocols includes an IPv6 network protocol. However, IPv6 is well known in the art (see the prior art make up record by Xiong et al., U.S. Patent Number 6,721,315)

57. With respect to claim 42, Gleichauf further teaches the data packet uses one or more of a layer 2 protocol, a layer 3 protocol, and a layer 4 protocol (column 6, lines 31-42; item 18 of figure 2 i.e. router is capable of encapsulating and decapsulating the datalink as layer 2 and network layer as layer 3. A layer 4 protocol is inherent because UDP is a layer 4 protocol).

58. With respect to claim 43, Gleichauf is silent on the layer 2 protocol is selected from the group consisting of ATM and frame relay. However, the layer 2 protocol, selecting from the group consisting of ATM and frame relay, is well known in the art (see prior made up record by Xiong et al., U.S. Patent Number 6,721,315).

59. With respect to claim 44, Gleichauf is silent on the layer 3 protocol is MPLS. However, the layer 3 protocol, MPLS, is well known in the art (see prior art made up record by Xiong et al., U.S. Patent Number 6,721,315).

60. Taking claim 45 as an exemplary claim, Gleichauf fails to teach the packet processing information lacks information that supports stateful processing.

In a system to manage delivery of a network service, Network Tap discloses the packet processing information lacks information that supports stateful processing (pages 11-15 i.e. tap is capable of sending or receiving packets without processing the packets).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Network Tap by processing information lacks information that supports stateful processing because this feature increases performance, high integration, and high reliablilty. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Network Tap in order to allow to monitor the network traffic flowing in both directions without interrupting the network traffic, even the power is lost.

61. With respect to claim 46, Gleichauf further teaches the packet processing information includes information that supports stateful processing (item 18 of figure 2 i.e. router is capable of inspecting packets incoming from the external network and determining which should be forwarded into the internal network. Therefore, the packet processing information is inherent as supporting stateful processing).

62. Claim 47 is also rejected for the same reason set forth in claim 45 above.

63. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf) and Network Tap, http://www.netoptics.com, page 1-28 (hereinafter Network Tap), as applied in claim 28 above, and further in view of Barnier, U.S. Patent Number 6,453,348.

64. With respect to claim 48, Gleichauf fails to teach a first access control list associated with a first customer, the data packet received from the first customer; and a second access control list associated with a second customer, the first access control list and the second access control list to manage network access to a shared firewall application.

In a system to manage delivery of a network service, Barnier discloses a first access control list associated with a first customer, the data packet received from the first customer; and a second access control list associated with a second customer, the first access control list and the second access control list to manage network access to a shared firewall application (figure 3 i.e. VPN).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Network Tap, and further in view of Bariner by sharing firewall application with the first access control list and the second access control list because this feature increases security among of customers. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify both Gleichauf and Network Tap, and further in view of Bariner in order to share the

same network among of customers with granting access to their own data and applications.

65. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf as applied to claim 1 above, and further in view of Nickle, U.S. Patent Number 6,134,591.

66. With respect to claim 4, Gleichauf fails to teach receiving a first network application response from the first network application; identifying the second network application based at least in part on the first network application response; and sending at least a portion of the first network application response to the second network application.

In a method of delivering a network service, Nickles discloses receiving a first network application response from the first network application; identifying the second network application based at least in part on the first network application response; and sending at least a portion of the first network application response to the second network application (figures 6 and 8 and abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Nickles by looping or redirecting to the second network application based on the responding of the first network application because this feature may increases the availability or sufficiency of the network. It is for this reason that one of ordinary skill in the

art at the time of the invention would have been motivated to modify Gleichauf in view of Nickles in order to protect the network securely without overloading the second network application processor.

67. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf and Network Tap as applied to claims 2 above, and further in view of Nickle, U.S. Patent Number 6,134,591.

68. With respect to claim 5, both Gleichauf and Network Tap teach receiving a first network application response from the first network application (item 20 of figure 2; column 5, lines 15-30); identifying the second network application (item 16 of figure 2).

However, both Gleichauf and Network Tap fail to teach identifying the second network application based at least in part on the first network application response and the second network interface; and sending at least a portion of the first network application response to the second network application.

In a method of delivering a network service, Nickles discloses identifying the second network application based at least in part on the first network application response and the second network interface; and sending at least a portion of the first network application response to the second network application (figures 6 and 8 and abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Network Tap,

and further in view of Nickles by looping or redirecting to the second network application based on the responding of the first network application because this feature may increases the availability or sufficiency of the network. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify both Gleichauf and Network Tap, and further in view of Nickles in order to protect the network securely without overloading the second network application processor.

69. Claims 62-66 and 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf).

70. Taking claim 62 as an exemplary claim, Gleichauf teaches a method of delivering data to a plurality of network applications (figure 2), the method comprising:

- receiving a first data packet, the first data packet including a first service address and a first data packet payload (item 18 of 2; and column 4, lines 50-67 i.e. router is capable of receiving packet among the internal and external network);
- identifying a first plurality of network applications associated with the first service address, the first plurality of network applications associated with the first service address including a first network

application (item 20 of figure 2), a second network application (item 16 of figure 2), and a third network application (item 12 of figure 2);

- sending at least the first data packet payload to the first network application (figure 2; column 4, lines 60-67; and column 5, lines 48-57);
- sending at least the first data packet payload to the second network application (item 18 and 16 of figure 2 i.e. router is capable of sending packet to firewall);
- receiving a second network application response packet from the second network application (figure 2 i.e. router is capable of receiving an outgoing package form firewall);
- sending a third network application packet to the third network application, the third network application packet based at least in part on the second network application response packet (column 5, lines 48-57; and item 18 of figure 2 i.e. router is capable of sending packages to workstation through firewall).
- receiving a second data packet, the second data packet including a second service address and a second data packet payload (item 18 of figure 2 i.e. router is capable of receiving another packet from the external network);

However, Gleichauf fails to teach identifying a second plurality of network applications associated with the second service address, the second plurality of network applications associated with the second service address including a fourth network application (item 20 of figure 2 i.e. IDS has the same functional of

the first application), a fifth network application (item 16 of figure 2 i.e. firewall has the same functional of the second application), and a sixth network application (item 12 of figures 2 i.e. workstations); sending at least the second data packet payload to the fourth network application (item 18 is also capable sending the second packet to the second IDS which is identical of first application); sending at least the second data packet payload to the fifth network application; receiving a fifth network application response packet from the fifth network application; and sending a sixth network application packet to the sixth network application, the sixth network application packet based at least in part on the fifth network application response packet.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to add a fourth, fifth, and sixth network applications without delineating any further process limitations of the first, second, and the third network applications because this feature may decreases the cost and increases the security among the clients by sharing the same network, i.e. VPN or may avoids the down time of the network system. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to add a fourth, fifth, and sixth network applications without delineating any further process limitations of the first, second, and the third network applications in order to increase the security and increase the up time as the redundant network without purchasing or building an additional system.

71. With respect to claim 63, Gleichauf further teaches receiving a first data packet includes receiving the first data packet at an Internet service provider; and receiving a second data packet includes receiving the second data packet at an Internet service provider (column 4, lines 50-67 i.e. "router serves as a gateway between internal network and an external network". Therefore, "first and second data packet at an ISP" is inherent as packet's flowing from the external network).

72. With respect to claim 64, Gleichauf further teaches at least one network application of the first plurality of network applications and the second plurality of network applications includes a passive real-time intrusion detection application (figure 2 i.e. item 20 is an IDS).

73. With respect to claim 65, Gleichauf further teaches at least one network application of the first plurality of network applications includes a remote network application (item 20 of figure 2 i.e. IDS).

74. With respect to claim 66, Gleichauf further teaches the remote network application is an Internet network application (figure 3 i.e. http or ftp).

75. With respect to claim 71, Gleichauf fails to teach determining an addition of a redundant network application, the redundant network application being the same as one or more network applications of the first plurality of network applications. However, determining an addition of a redundant network

application is well known in the art (see the prior art made up record, by Dr. Vincent C. Jone, www.networkingunlimited.com/white001.html)

76. With respect to claim 72, Gleichauf fails to teach detecting a failed network application of the first plurality of network applications; and directing a third data packet to the redundant network application based at least in part on detecting the failed network application. However, detecting a failed over and directing to another network application is inherent as the redundant nework (see the prior art made up record, by Dr. Vincent C. Jone, www.networkingunlimited.com/white001.html).

77. Claims 67-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf et al., U.S. Patent Number 6,499,107 (hereinafter Gleichauf) as applied in claim 62 above, and further in view of Barnier, U.S. Patent Number 6,453,348.

78. With respect to claim 67, Gleichauf fails to teach the first data packet is received from a first customer; and the second data packet is received from a second customer, the first customer being different from the second customer.

In a system to manage delivery of a network service, Barnier discloses the first data packet is received from a first customer; and the second data packet is received from a second customer, the first customer being different from the second customer (figure 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Bariner by receiving the first data packet from a first customer and the second data packet from the second customer, the first customer being different from the second customer because this feature increases security among of customers by sharing the same network. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Bariner in order to share the same network among of customers with granting access to their own data and applications.

79. With respect to claim 68, Gleichauf further teaches the first network application and the fourth network application are the same network application (item 20 of figure 2 i.e. IDS).

80. With respect to claim 69, Gleichauf is silent on the second network application and the fifth network application are the same network application. However, the second network application is interpreted as the same as the fifth network application because the second and fifth network applications have the same functional and structure.

81. With respect to claim 70, Gleichauf fails to teach receiving a first service management instruction from the first customer; modifying a first service data record corresponding to the first service address based at least in part on the first

service management instruction; receiving a second service management instruction from the second customer; and modifying a second service data record corresponding to the second service address based at least in part on the second service management instruction.

In a system to manage delivery of a network service, Barnier discloses receiving a first service management instruction from the first customer; modifying a first service data record corresponding to the first service address based at least in part on the first service management instruction; receiving a second service management instruction from the second customer; and modifying a second service data record corresponding to the second service address based at least in part on the second service management instruction (figures 3-4 and column 5, lines 25-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Bariner by receiving and modifying data based on first and second customer because this feature increases security among of customers by sharing the same network. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Bariner in order to share the same network among of customers with granting access to their own data and applications.

82. Claims 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf and Network Tap as applied to claim 74 above, and further in view of Boden et al., U.S. Patent Number 6,615,357 (hereinafter Boden).

83. With respect to claim 75, both Gleichauf and Network Tap fail to teach the first packeting engine includes means for service port translation.

In a system to manage delivery of a network service, Boden discloses the first packeting engine includes means for service port translation (figure 4-7; column 6, lines 32-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Network Tap, and further in view of Boden by adding service port translation to the first packeting engine because this feature decreases network address or port conflicts. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify both Gleichauf and Network Tap, and further in view of Boden in order to provide a solution to address or port collision problems cased by VPNs.

84. Claim 76 is also rejected for the same reason set forth in claim 75 above.

85. With respect to claim 77, both Gleichauf and Network Tap fail to teach one or more of the first network application, the second network application, and the third network application include means for application service port negotiation.

In a system to manage delivery of a network service, Boden discloses one or more of the first network application, the second network application, and the third network application include means for application service port negotiation (figures 4-7; and column 3, lines 45-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Network Tap, and further in view of Boden by adding application service port negotiation because this feature decreases network address or port conflicts. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify both Gleichauf and Network Tap, and further in view of Boden in order to provide a solution to address or port collision problems cased by VPNs.

86. Claim 78 is also rejected for the same reason set forth in claim 77 above.

87. Claims 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf as applied to claim 73 above, and further in view of Shanklin et al., U.S. Patent Number 6,578,147 (hereinafter Shanklin).

88. Taking claim 81 as an exemplary claim, Gleichauf fails to teach the first packeting engine performs TCP stateless load balancing of a plurality of service addresses to multiple applications.

In a system to manage delivery of a network service, Shanklin discloses the first packeting engine performs TCP stateless load balancing of a plurality of service addresses to multiple applications (figures 2-4; column 5 lines 21-55; and column 6, lines 29-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Shanklin by performing TCP stateless load balacing of the first and second engine because this feature avoids bottleneck. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to provide a processor-based intrusion detection system that can keep up with the high traffic.

89. Claim 82 is also rejected for the same reason set forth in claim 81 above.

90. Claims 83-85, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichauf as applied to claim 73 above, and further in view of Genty et al., U.S. Patent Number 6,738,910 (hereinafter Genty).

91. With respect to claim 83, Gleichauf fails to teach a second packeting engine, the second packeting engine coupled to the first packeting engine, the second packeting engine including a second means for receiving the data packet having the service address and the payload, a second means for identifying the plurality of network applications based at least in part on the service address, the plurality of network applications including at least the first network application, the

second network application, and the third network application, a second means for distributing at least the payload of the data packet to the first network application and the second network application based at least in part on the service address, a second means for sequentially processing the data packet through at least the second network application and the third network application based at least in part on the service address, and a second means for sending the data packet service response based at least in part on the data packet sequential processing.

However, Gleichauf teaches the first packeting engine (figure 2).

In a system to manage delivery of a network service, Glenty discloses the second packeting engine (item 720 of figue 7) without delineating any further process limitation of the first packeting engine (item 718 of figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Glenty by adding second packeting engine without delineating any further process limitations of the first packeting engine because this feature avoids the down time of the network system. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Glenty in order to increase the up time as the redundant network without purchasing or building an additional system.

92. With respect to claim 84, Gleichauf fails to teach the first packeting engine and the second packeting engine are stateless, redundant packeting engines.

In a system to manage delivery of a network service, Genty discloses the first packeting engine and the second packeting engine are stateless, redundant packeting engines (figure 7; and column 6, lines 43-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Glenty by specifying the first and second packeting engine as stateless or redundant packeting engines because this feature avoids the down time of the network system. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Glenty in order to increase the up time as the redundant network without purchasing or building an additional system.

93. With respect to claim 85, Gleichauf fails to teach means for load sharing between the first packeting engine and the second packeting engine.

In a system to manage delivery of a network service, Genty discloses means for load sharing between the first packeting engine and the second packeting engine (column 2, lines 2-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Glenty by sharing between the first and second packeting engines because this feature avoids the down time of the network system. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to

modify Gleichauf in view of Glenty in order to increase the up time as the redundant network without purchasing or building an additional system.

94. With respect to claim 88, Gleichauf fails to teach the first packeting engine and the second packeting engines are part of a network service provider system.

In a system to manage delivery of network service, Genty discloses the first packeting engine and the second packeting engine are part of a network service provider system (figure 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Gleichauf in view of Glenty by specifying the first and second packeting engines as part of a network service provider system because this feature avoids the down time of the network system. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Gleichauf in view of Glenty in order to increase the up time as the redundant network without purchasing or building an additional system.

95. Claims 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf and Genty as applied to claim 83 above, and further in view of Network Tap, http://www.netoptics.com, page 1-28 (hereinafter Network Tap).

96. With respect to claim 86, both Gleichauf and Genty fail to teach the first packeting engine is to handle inbound traffic and the second packeting engine is to handle outbound traffic.

In a system to manage delivery of a network service, Network Tap discloses the first packeting engine is to handle inbound traffic and the second packeting engine is to handle outbound traffic (pages 11- 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Genty, and further in view of Network Tap by handling the inbound traffic as the first packeting engine and handling the outbound traffic as the second packeting engine because this feature increases the performance and allows full-duplex monitoring of network traffic without interrupting data traffic. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify both Gleichauf and Genty, and further in view of Network Tap in order to allow users to monitor the full-duplex traffic between two Fast Ethernet devices.

97. Claims 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over both Gleichauf and Genty as applied to claim 83 above, and further in view of Shanklin et al., U.S. Patent Number 6,578,147 (hereinafter Shanklin).

98. With respect to claim 87, both Gleichauf and Genty fail to teach the first packeting engine and the second packeting engine perform TCP stateless load balancing for the service address.

However, Genty teaches the first packeting engine and the second packeting engine perform TCP for the service address.

In a system to manage delivery of network service, Shanklin discloses the packeting engine perform TCP stateless load balancing for the service address (figures 2-5 and see abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Gleichauf and Genty, and further in view of Shanklin by performing TCP stateless load balacing of the first and second engine because this feature avoids bottleneck. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to provide a processor-based intrusion detection system that can keep up with the high traffic.

Conclusion

99. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Method and apparatus for network caching and load balancing," by Squire et al., U.S. Patent Application Publication Number 2002/0049840.

b. "Load balancing," by Zisapel et al., U.S. Patent Number 6,665,702.

c. "Mechanism for delivering a message based upon a source address," by Kalajan, U.S. Patent Number 6,304,908.

d. "Extranet architecture," by Barnier et al., U.S. Patent Number 6,453,348.

e. "Network security and integration method and system," by Nickles, U.S. Patent Number 6,134,591.

f. "Packet protocol for encoding and decoding video data and data flow signals and devices for implementing the packet protocol," by Frink et al., U.S. Patent Application Publication Number 2003/0133448.

g. "Efficient network multicast switching apparatus and methods," by Mahajan et al., U.S. Patent Number 6,785,274.

h. "Authenticated firewall tunneling framework," by Brownell, U.S. Patent Application Publication Number 2002/0169980.

100. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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